## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	) Group Art Unit: 3643
Micke et al.	) Examiner:
Serial No.: Not yet assigned	) FIRST PRELIMINARY AMENDMENT
Filed: Herewith	) "EXPRESS MAIL" MAILING LABEL NUMBER: EL 822581202 US DATE OF DEPOSIT: November 2, 2001
Atty. File No.: 3957-8-DIV	I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED     WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST     OFFICE TO ADDRESSEE" SERVICE UNDER 37 CFR 1.10 ON THE DATE
For: "METHOD AND APPARATUS FOR REMOVING OBSTRUCTIONS IN MINES"	) INDICATED ABOVE AND IS ADDRESSED TO THE ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231.  ) TYPED OR PRINTED NAME: Angela P. Davis  ) SIGNATURE:

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Prior to the initial review of the above-identified patent application by the Examiner, please enter the following Preliminary Amendment. Although Applicants do not believe that any fees are due based upon the filing of this Preliminary Amendment, please charge any such fees to Deposit Account 19-1970.

Please amend the above-identified patent application as follows:

## **IN THE SPECIFICATION:**

Please replace the paragraph at page 1, lines 4-12, with the following:

## CROSS REFERENCE TO RELATED APPLICATIONS

The present application is a divisional application of U.S. Application Serial No. 09/173,876, filed October 16, 1998, and entitled "Method and Apparatus for Removing Obstructions in Mines",

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which claims priority both from U.S. Provisional Patent Application Serial No. 60/062,537, filed October 17, 1997, and entitled "A Method and Apparatus for Removing Draw Point Blockages,

Scaling Unstable Rock Formations and Breaking Free-Standing Boulders" and from U.S. Provisional

Patent Application Serial No. 60/087,058, filed May 28, 1998, and entitled "Method and Apparatus

for Removing Obstructions in Mines," which are incorporated fully herein in their entireties.

Please amend the paragraph at page 17, line 11, to page 18, line 5, as follows:

The detonating device 90 is movably and loosely mounted in a detonating device passageway 134 to permit the detonating device to experience some lateral (side-to-side) and longitudinal (end-toend) movement. This is accomplished by having a gap between the outer walls of the detonating device 90 and the inner walls of the detonating device passageway 134. It has been discovered that the gap provides more reliable initiation compared to a detonating device that is securely held in a fixed position in the passageway. The gap between the side wall of the detonating device and the side wall of the pocket preferably ranges from about 0.5 to about 4.0 mm. The detonating device 90 is further capable of moving back-to-front by contacting with the explosive charge. Preferably, the detonating device volume ranges preferably from about 45 to about 90 percent of the pocket volume; the length of the detonating\_device ranges preferably from about 75 to about 100% of the length of the pocket; and the width of the detonating device ranges preferably from about 65 to about 95% and more preferably from about 75 to about 85% of the width of the pocket.

Application No.: Not yet assigned

Atty. File No. 3957-8-DIV

IN THE CLAIMS:

Please cancel Claims 9-26 without prejudice to or disclaimer of the subject matter contained

therein.

**REMARKS/ARGUMENTS** 

The above amendments are being submitted in connection with the national stage filing of the

present Application. The amendments eliminate the multiple dependent claims from the Application.

Attached hereto is a marked up version of the changes made to the specification and claims

by the current amendment. The attached page is captioned "Version With Markings to Show

Changes Made."

Respectfully submitted,

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Application No.: Not yet assigned

Atty. File No. 3957-8-DIV

**VERSION WITH MARKINGS TO SHOW CHANGES MADE** 

In the Specification:

Replace the paragraph at page 1, lines 4-12, as follows:

This application claims priority from U.S. Provisional Patent Application Serial No.

60/062,537, filed October 17, 1997, and entitled "A Method and Apparatus for Removing Draw

Point Blockages, Scaling Unstable Rock Formations and Breaking Free-Standing Boulders" and from

U.S. Provisional Patent Application Serial No. 60/087,058, filed May 28, 1998, and entitled "Method

and Apparatus for Removing Obstructions in Mines," which are incorporated fully herein in their

entireties.

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The present application is a divisional application of U.S. Application Serial No. 09/173,876,

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which claims priority both from U.S. Provisional Patent Application Serial No. 60/062,537, filed

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Scaling Unstable Rock Formations and Breaking Free-Standing Boulders" and from U.S. Provisional

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device 90 and the inner walls of the detonating device passageway 134. It has been discovered that

the gap provides more reliable initiation compared to a detonating device that is securely held in a

fixed position in the passageway. The gap between the side wall of the detonating device and the side

wall of the pocket preferably ranges from about 0.5 to about 4.0 mm. The detonating device 90 is

further capable of moving back-to-front by contacting with the explosive charge. Preferably, the

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detonating device pocket volume; the length of the pocket detonating device ranges preferably from

about 75 to about 100% of the length of the detonating device 90 pocket; and the width of the pocket

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to about 85% of the width of the detonating device 90 pocket.

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